

B1
and
preferable rate of about 50 to about 200 sccm. Preferably, a noble gas, such as helium or argon, is also flown into the chamber at a rate of about 200 to about 1000 sccm. The chamber pressure is maintained preferably at about 6 to about 10 Torr. A single 13.56 MHz RF power source preferably delivers about 400 to about 600 W to the chamber, preferably about 5.7 to about 8.6 W/in². The substrate surface temperature is preferably maintained at about 300° to about 400° C during the deposition of the SiC and the substrate is preferably located about 300 to about 500 mils from a gas showerhead.

Please replace the paragraph at pg. 9 lines 6 –11, with the following paragraph:

P2
Table 5 shows the results of the plasma treatment of SiC in an ashing compatibility study. A series of specimens with SiC was treated with He or N₂O plasma according to the present invention, using the preferred process parameters described in Tables 1 and 2 above. A specimen of SiC layer was left untreated as a comparison specimen and another specimen deposited an undoped silicon glass (USG) layer on the SiC layer as another comparison specimen.

Please replace the paragraph at pg. 11 ln. ¹¹~~11~~– pg. ¹¹~~12~~, ln. ²²~~1~~, with the following paragraph:

P3
A series of SiC layers was exposed to the N₂O plasma treatment according to process regimes set forth in Table 2. Specifically, for this example, about 1500 sccm of N₂O gas was flown into the chamber, the chamber pressure was maintained at about 8.5 Torr, a RF power of about 250 W was delivered to the chamber with a substrate temperature of about 350°C to about 400°C and a substrate to gas plate spacing of about 400 mils. In this test, the substrate layers included a 5000-20000 Å thick layer of USG, a 200-1000 Å thick layer of SiC, followed by another USG layer deposited thereon, and then capped with a 500 Å layer of nitride material. The SiC layer was treated with the plasma of the present invention prior to deposition of the USG layer. In one set of tests, specimens having a SiC layer were treated with an N₂O plasma for about 20 seconds. On one set of specimens, a 7000 Å layer of USG material was